

### Claims

1. A feeder element for use in metal casting, said feeder element having a first end for mounting on a mould pattern, an opposite second end for receiving a feeder sleeve and a bore between the first and second ends defined by a sidewall, said feeder element being compressible in use whereby to reduce the distance between said first and second ends.
2. A feeder element as claimed in claim 1, wherein the initial crush strength is no more than 5000 N
3. A feeder element as claimed in claim 1 or 2, wherein the initial crush strength is at least 500 N.
4. A feeder element as claimed in any preceding claim, wherein said compression is non-reversible.
5. A feeder element as claimed in any preceding claim, wherein compression is achieved through the deformation of a non-brittle material
6. A feeder element as claimed in any preceding claim, wherein the feeder element has a stepped sidewall which comprises a first series of sidewall regions in the form of rings of increasing diameter interconnected and integrally formed with a second series of sidewall regions.
7. A feeder element as claimed in claim 6, wherein said rings are circular.

8. A feeder element as claimed in claim 6 or 7, wherein said rings are planar.
9. A feeder element as claimed in any one of claims 6 to 8, wherein the sidewall regions are of substantially uniform thickness, so that the diameter of the bore of the feeder element increases from the first end to the second end of the feeder element.
10. A feeder element as claimed in any one of claims 6 to 9, wherein the second series of sidewall regions are annular.
11. A feeder element as claimed in any one of claims 6 to 10, wherein the angle defined between the bore axis and the first sidewall regions is from about 55 to 90°.
12. A feeder element as claimed in any one of claims 6 to 11, wherein the sidewall region defining the first end of the feeder element is inclined to the bore axis by an angle of 5 to 30°.
13. A feeder element as claimed in any one of claims 6 to 12, wherein the thickness of the sidewall regions is from about 4 to 24% of the distance between the inner and outer diameters of the first sidewall regions.
14. A feeder element as claimed in claim 13, wherein a free edge of the sidewall region defining the first end of the feeder element has an inwardly directed annular flange or bead.

15. A feeder element as claimed in any one of claims 1 to 5, wherein the sidewall of the feeder element is provided with one or more weak points which are designed to deform or shear in use under a predetermined load.

16. A feeder element as claimed in claim 15, wherein the sidewall is provided with at least one region of reduced thickness which deforms under a predetermined load.

17. A feeder element as claimed in claim 15 or 16, wherein the sidewall is provided with one or more kinks, bends, corrugations or other contours which cause the sidewall to deform under a predetermined load.

18. A feeder element as claimed in any one of claims 15 to 17, wherein the bore is frustoconical and bounded by a sidewall having at least one circumferential groove.

19. A feeder system for metal casting comprising a feeder element in accordance with any one of claims 1 to 18 and a feeder sleeve secured thereto.

20. A feeder system in accordance with claim 19, in which the feeder sleeve is secured to the feeder element by adhesive or by being a push fit with the feeder element or by moulding the sleeve around part of the feeder element.